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AUTHOR Kushmuk, James
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ABSTRACT

This report describes a research effort and some preliminary findings on effective school practices as they apply to the Portland (Oregon) Public Schools' Education Consolidation and Improvement Act (ECIA) Chapter 1 program, which is a supplementary basic skills instructional program for low-achieving students. Nearly 60 hours of unsystematic observations of teacher practices took place during the 1984-85 school year in the regular reading and mathematics classrooms of 10 Chapter 1 elementary schools. Observations focused on classroom management practices, direct instruction, instructional planning and coordination, and school climate and organization. These observations were supplemented by open-ended interviews with selected teachers and principals. Findings were consistent with those of previous studies. Concluding remarks discuss the findings from an organizational perspective and provide a proposed model for creating schools that can effectively help low-ability students achieve mastery in basic skills. The model identifies the key areas and the proper sequence of school-level interventions that are likely to succeed, as well as variables outside the control of schools that constrain successful change. Although focused on Chapter 1 students, the findings are thought to be applicable to school improvement in general. (RH)

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EFFECTIVE CHAPTER I PRACTICES IN THE PORTLAND PUBLIC SCHOOLS

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James Kushmuk

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EFFECTIVE CHAPTER I PRACTICES IN THE PORTLAND PUBLIC SCHOOLS

For many years now, much attention has been devoted to the study of effective schools in an attempt to isolate school practices which are correlated with, and presumably responsible for, high levels of academic achievement. This report describes a research effort and some preliminary findings on effective school practices as they apply to the ECIA Chapter I program in the Portland Public Schools, a supplementary basic skills instructional program for low-achieving students. Although focused on Chapter I students, the findings have applicability to school improvement in general.

The notion of creating better schools through improved management and instructional practices is still a popular one, but the effective schools movement rests on a research base which has yet to fully explain how outstanding schools are created and maintained. In addition to methodological flaws, a more important shortcoming of the research is its failure to lead educators to a theory of effective schooling. In the endless advice on how to improve schools, there is still little understanding of how key variables interact to produce exceptional gains in academic achievement. Although sorting out cause and effect can be an illusive search in an organization as complex as a public school, this pursuit is worthwhile if it results in a model for transforming ineffective schools into

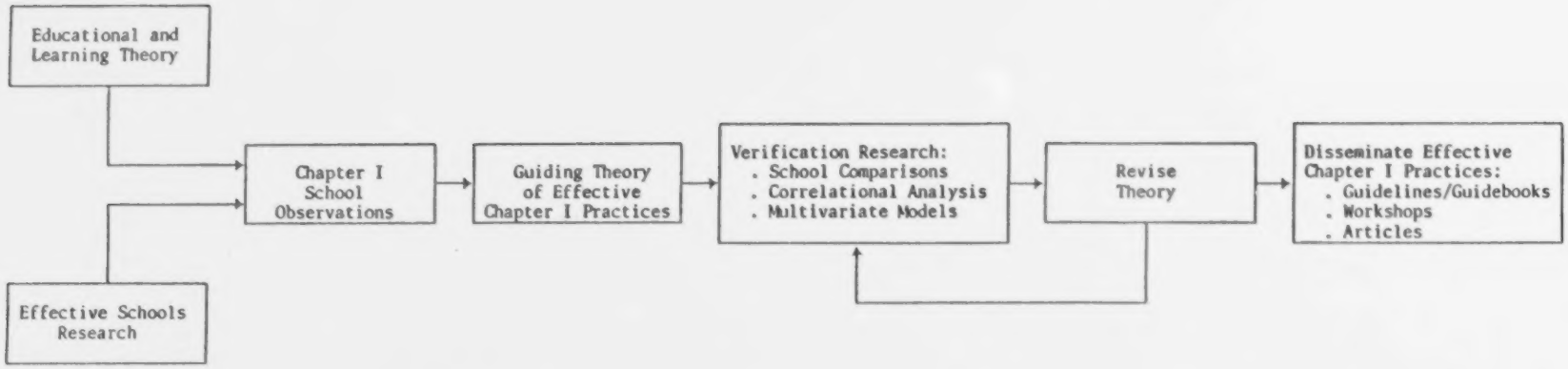
effective ones. Cuban (1984) characterizes the current state-of-the-art of effective schooling by stating that "road signs exist, but maps are not yet for sale." Research which is more theory-based can help educators through this impasse.

The observational findings described in this report fit into the larger context of a proposed research and dissemination program which has as its key feature a theory-based approach (see Figure 1). Critics of the effective schools research (Fenstermacher, 19__; Cohen, 1981; and Cuban, 1984) have rightfully warned that in the absence of a model of effective schools, a leap of faith is substituted whereby weak correlational findings are converted into strong medicine for school improvement. The theory-based approach avoids this pitfall resulting in more definitive and usable findings. What would a theory of effective schools look like? First, it would provide a better understanding of cause and effect. Second, it would separate key variables from trivial ones and identify the crucial points of intervention. Finally, an adequate theory would provide for a richer description and more guidance than is presently at hand for improving school practices.

The first phase of this research consisted of open-ended classroom observations during the 1984-85 school year in ten Chapter I schools. These K-8 schools were selected to represent effective and ineffective Chapter I programs as measured by achievement gains. Figure 2 (reading) and Figure 3 (math) depict the ten schools in terms of the differences between the 1983-84

FIGURE 1

THEORY BASED RESEARCH APPROACH FOR
EFFECTIVE CHAPTER I PRACTICES



Adapted from Smith and Geoffrey (1968)

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fall-to-spring achievement gains of Chapter I students and non-Chapter I students. For example, Figure 2 shows that within School A, the mean reading gain of Chapter I students standardized across grades 3-8 exceeded that of the non-Chapter I students by nearly 3 standard deviations. On the other end of the spectrum is School J whose Chapter I students gained one-quarter of a standard deviation below the other students in the school. In this sense, effectiveness is the extent to which the Chapter I students are catching up to their higher-ability peers in the same school. Table 1 presents a different perspective of the same schools, showing seven schools that ranked high among the 49 Chapter I sites and three that ranked low along the criterion of standardized fall-to-spring gain (GROW) of Chapter I students combined from grades 3-8. School stability and a socioeconomic indicator are also presented showing that the degree of effectiveness is not explainable solely on the basis of school population characteristics. For example, the percent of low-income families does not consistently separate the effective programs from the ineffective ones in the predicted direction.

Nearly 60 hours were spent observing teacher practices in the ten schools both in Chapter I and regular reading and math classrooms, supplemented by open-ended interviews with some teachers and principals. These unsystematic observations provided a first-hand look at a range of programs and the daily operations of classrooms in the hopes of coming to a fuller understanding of how effective practices work and how they are

FIGURE 2. 1983–84 READING GAINS
OF CHAP I STUDENTS OVER OTHERS IN SAME SCHOOL

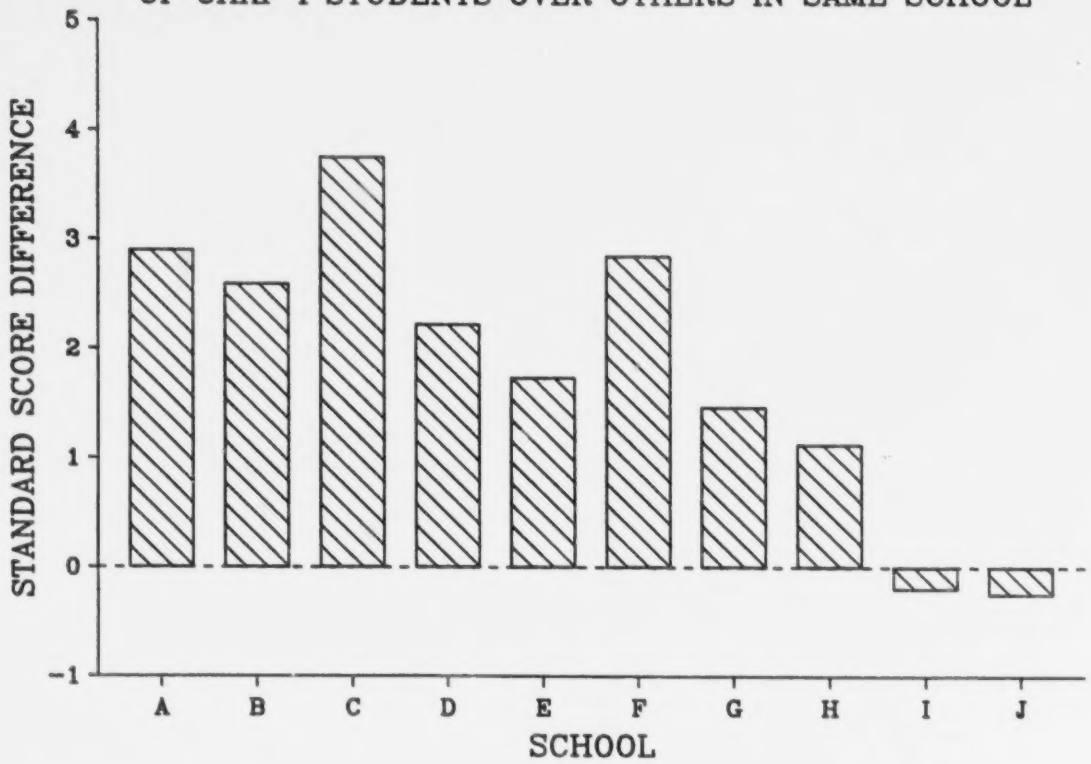

FIGURE 3. 1983–84 MATH GAINS
OF CHAP I STUDENTS OVER OTHERS IN SAME SCHOOL

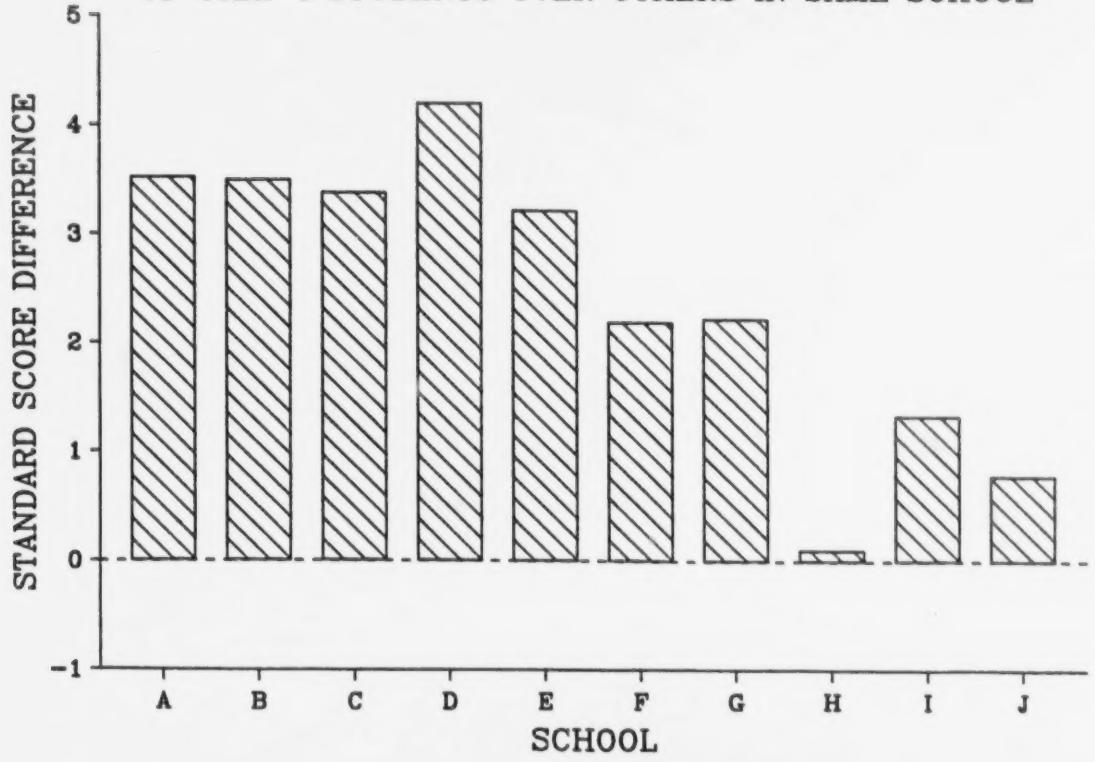

TABLE 1
SELECTED CHARACTERISTICS OF THE OBSERVED SCHOOLS

School	Grades	Reading 1983-84 Rank[a]	Reading 1983-84 GROW	Math 1983-84 Rank[a]	Math 1983-84 GROW	Stability Index[b]	% Low Income Families
A	K-4	1	4.11	1	3.61	63.2	60.4
B	K-8	2.5	2.80	4	2.99	72.4	34.2
C	P-5	4	2.73	11	1.96	72.9	59.3
D	5-8	5	2.66	3	3.09	84.7	55.5
E	K-8	8	1.78	5	2.53	43.8	54.2
F	K-5	10	1.54	12	1.92	52.5	46.2
G	K-8	12	1.33	13	1.91	72.0	31.1
H	K-5	34	0.15	39.5	-0.27	71.4	44.2
I	K-4	39.5	-0.31	30	0.69	77.9	79.5
J	P-5	46	-0.74	32	0.59	59.4	40.9

a Rank among the 49 Chapter I sites in achievement gain for program students.

b Percent of students enrolled at the beginning of the school year who are still in the same school in June.

c Low-income families include those on ADC or free- and reduced-lunch program.

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linked. Four key areas provided the focus of the observations: classroom management practices, direct instruction, instructional planning and coordination, and school climate and organization.

Presented in this report are the results and insights derived from the school observations. These surely are not definitive findings, but are intended as food for critical thought about effective practices.

Observational Findings

As an illustration of the extremes in practices that were observed, two classroom descriptions are provided that actually occurred on the same day at the same school, a school that was designated as effective based on the achievement gains criterion.

Classroom 1: This Chapter I session had the teacher leading four third-grade students in a very focused reading lesson. The lesson began with a short drill and practice on phonemes. The teacher explained the purpose of this drill; that is, the importance of consonant sounds vis-a-vis their regular reading lessons. Pieces of alphabet cereal were used for rewarding correct answers. At the very start, the teacher asked simple questions ensuring that all students were rewarded thereby beginning the lesson on a note of success. The drill was followed by a teacher-led reading exercise. Students were required to read along or at the very least follow the text with their finger. The teacher asked frequent questions, some directly related to comprehension, some Socratic-type

questioning, and some questions and comments intended to spark interest. All children were highly absorbed in the reading lesson with very little off-task behavior; when children did drift away, they were immediately brought back to task. The teacher was warm and encouraging throughout the lesson.

Classroom 2: This session was also a Chapter I small group exercise led by a different teacher for fourth- and fifth-grade math students. The method here was to start students on individual exercises and then ignore them as long as extreme disruptions did not occur (moderate disruptions were tolerated). One boy was particularly defiant and left the classroom on his own. The teacher occasionally tried to exert authority but in a weak and ineffectual manner. Most students accomplished little or nothing during the lesson. Students roamed around the room sometimes working but often playing. Two students spent almost the entire class under the table with their workbooks laughing and giggling. It seemed obvious that this class was not capable of constructively making use of the unstructured freedom for independent study, yet the teacher did little to intervene.

These two classrooms observed in the same "effective" Chapter I school illustrate the most general finding of the school observations. Schools defined as effective in the usual manner of school-wide academic achievement may not exhibit absolute consistency across all classrooms. An important unit of analysis for effective schools research is the classroom/teacher combination. Consistency in the type and quality of classroom

practices is, of course, not an all-or-none phenomenon. What did seem to emerge across the ten schools was a greater degree of consistency in the most effective programs. The less effective schools exhibited some effective practices here and there, but not in the unified manner of the highest-performing schools. The implication here is that piecemeal effective school practices may have little overall impact.

Related to the theme of consistency are the frequency and intensity with which effective practices are applied to both Chapter I and regular classrooms. Teacher practices purported to be effective may indeed produce few desired effects if applied in a weak and inconsistent manner. For example, using rewards and praise to change the behavior of problem students may not succeed if these methods are only occasional, non-discriminatory, or non-specific. Two basic ingredients for successfully applying effective practices seemed to be: 1) conscientious teacher effort, and 2) flexibility in adapting prescribed methods to different classroom settings and different types of students. As others have stated, effective practices are by no means easy or fool-proof formulas for success. Strong teacher effort, a concerted school effort towards excellence, and the ability to intelligently apply appropriate practices in different situations characterized the most effective schools and teachers.

A final general observation was that no single teaching style stood out above the others in producing on-task, learning-focused classrooms. Children, their backgrounds and

skill levels, and the organizational conditions of a school are much too complex to warrant a formula approach to teaching. Effective teachers seemed to have an awareness of this simple fact and were able to adjust their teaching methods, within the limits of their own skills and personalities, to the prevailing students and classroom conditions. In effective classrooms, the quality of the teacher-student interactions seemed to be paramount while prescriptive approaches were secondary. That is, when a teacher was interested and knowledgeable in the material being taught, sparked at least some degree enthusiasm among the students, and when student-teacher interactions were characterized by a clear understanding of the teacher and learner roles with mutual self-respect, on-task and learning-focused behavior seemed to follow naturally without extensive behavior management techniques. The implication here is that the crucial points of intervention for producing effective schools may be in the realms of teacher skill level, and the motivation and attitudes of both teachers and students. Consistent with this observation are recent reviews of the research (Murane, 1981 and Clark, et al, 1984) which stress the importance of people over procedures in explaining effective schools. In addition to these general observations, findings specific to the four areas also emerged.

Classroom Management

Given the large number of classrooms that were observed, it was clear that teachers approached their daily task using somewhat different styles of managing the classroom and relating to their students. Among the teachers who effectively kept their lessons focused and their students engaged, some treated their students as near equals while others stressed superior/subordinate roles. Some were very warm while others were more businesslike. In some effective classrooms, formalized token reward systems were used while other teachers used only mild praise. The same teacher might also use different styles at different times. Well-managed classrooms were not a function of an ideal teacher style or a rigid set of prescriptions as much as providing the proper inducements for students to learn. These inducements were: 1) materials and a variety of teaching approaches to hold student interest, 2) rewards and praise with negative incentives used only when all else fails, 3) communicating the expectation to low-ability students that they are capable of mastery if effort is applied, and 4) addressing in some manner student problems outside of the classroom that impede learning. When these proactive strategies were used, extreme behavioral management practices, which surely become time-consuming and counterproductive at some point, were avoided. If disruptions did occur, a firm warning was often all that was needed if such warnings were genuine and backed by action.

The ability of a teacher to manage her classroom and keep students on-task is of course mitigated by other factors including the presence or absence of an aide, class size, the age of students, and the subject matter being taught. In some situations, a loosely-structured classroom seemed desirable resulting in spontaneity and perhaps more learning. Some of the ineffective classrooms seemed to pursue tight behavioral management over all else while paying little attention to student motivation and interest level. In the most ineffective classrooms, little attention was paid to either behavior or learning. This laissez-faire approach almost uniformly resulted in extremely off-task classrooms except in a very few situations where student self-motivation seemed very high to begin with.

In addition to these general observations, some additional caveats are offered in regards to effective classroom management.

- Off-task behavior that is not readily visible is often tolerated, yet this is probably as detrimental to learning as loud disruptive behavior. Effective teachers used some method of constantly monitoring the classroom and quickly corrected any behaviors (including inattentiveness) that were not academically focused. The use of an aide and a classroom arrangement where all students were visible facilitated this.
- Students were sometimes praised in a perfunctory manner or in a weak voice such that they may not have been aware of the praise they were receiving. At the other

extreme, excessive and non-discriminatory praise may cause students to tune out after a time. Judicious and genuine verbal praise characterized the most effective use of this practice.

- The use of volunteer tutors in the HOSTS program, while providing the advantage of one-to-one instruction, has some pitfalls which teachers should be aware of. Some of the HOSTS classes observed were characterized by a social rather than a learning atmosphere in which case students may not have been as attentive to learning as in a teacher-directed Chapter I lab. Careful selection and in-class monitoring of volunteer tutors are two mechanisms whereby teachers can ensure that HOSTS labs resemble learning environments.

Direct Instruction

The effective schools literature has extolled the virtues of direct instruction for the teaching of basic skills, particularly with low-ability children such as those in Chapter I. Good (1979) describes this approach as "active teaching" characterized by an academic focus, extensive coverage of important skill areas, high levels of student involvement in learning tasks, goal orientation, and testing and feedback. This approach was clearly the norm that effective teachers seemed to strive for, particularly with young students (grades 2-3). Recent findings of a path analysis study of effective school variables conducted

in the Seattle Public Schools are relevant here. The study by Ramey and Hillman (1983) found that for reading, the direct instruction approach worked best for primary graders (2-3), but that among 4th-6th graders, high academic achievement was an indirect function of independent seat work (as opposed to total group teacher-led instruction) mediated by high time-on-task. Beyond the primary grades where teacher-led instruction works best, independent study becomes an important instructional strategy.

Several teachers in effective classrooms, although still clearly in charge of the lesson, used some elements of indirect instruction in their teaching. What was observed might be characterized as a "stop and think" approach to teaching whereby the direct line of instruction was interspersed with Socratic-type questioning. This allowed for an indirect check of student mastery of the skill or concept, and increased student interest through the use of real-life examples and student interchange. This was in contrast to a dry, mechanical approach to direct instruction that was observed in other classrooms.

Motivation appeared to be a very important part of effective instruction, again the precedence of people over routinized procedures. The ideal situation was one where students felt some enthusiasm toward learning rather than having to be goaded into action. In some exemplary classrooms, students did not need constant reminders by the teacher to stay on-task. Such lessons were sometimes characterized by high-interest material, the

teacher's own enthusiasm and knowledge of the material, and a combination of having students experience success and feel challenged through different instructional techniques.

In regards to motivation, students such as those in Chapter I who are not experiencing academic success can benefit greatly from extrinsic rewards (praise, token systems) for on-task behavior. At some point, however, the desire to learn must be intrinsically rewarding as these students graduate from Chapter I and move into more difficult learning environments. Will the transition from extrinsic rewards to intrinsic motivation happen on its own? If not, how do Chapter I and regular teachers, working in concert, proceed? This is an important motivational issue.

Frequent monitoring of student progress through in-class testing has been identified as an important instructional practice in the effective schools literature. Some very test-wise teachers in the observed schools recognized that non-threatening in-class testing, and the teaching of PALT test vocabulary and test-taking strategies are ways to help students perform better on District achievement tests. Short of "teaching the test," this seems to be a valid and effective technique. Nevertheless, it does point to the inadequacy of measuring the effectiveness of schools solely on the basis of achievement test scores. Surely principals ant teachers can focus great effort on raising student test scores, but is this truly an effective school in terms of broader educational goals?

Planning and Coordination

Teachers who stressed the importance of planning were of the opinion that instructional planning done outside of the classroom surely results in smoother and more learning-focused classrooms. They believed that if it was worth doing at all, then it must be done in a meticulous manner; for example, down to the smallest skill unit possible. Such a plan ensures adherence to District curriculum goals and the proper sequencing of basic skills instruction. To remind both themselves and students of what the focus should be, PALT reading and math goals were sometimes posted in classrooms. An awareness of the learning goals and specificity in relating instruction to District goals rather than other goals (i.e., basal reading goals) seems crucial if instructional planning is to pay off in student achievement gains. Although this seems obvious, it appeared to be more the exception than the norm in the observed schools.

An issue related to thoughtful instructional planning is coordination between the two types of basic skills instruction which Chapter I students receive--that is, instruction from the regular teacher and supplemental instruction from Chapter I staff. An important finding here was that coordination left to happen on its own may never in fact occur. Coordination must be vigorously pursued and built into the organization of the school when at all possible; for example, scheduled weekly meeting to monitor student progress, or the use of an individual student

form where the regular teacher communicates student progress to Chapter I staff. Two of the effective schools organizationally combined the regular language arts block with Chapter I and other special programs in ways that made it mandatory for regular and special teachers to confer about the students whom they jointly served.

School Climate and Organization

Although a clear definition of school climate has yet to evolve out the effective schools literature, positive learning and behavioral climates certainly seem to be prerequisites for high academic performance. In their critical review of the effective schools research, Purkey and Smith (1983) conclude that excellent schools are not so much a set of routinized practices as they are a "culture" held together by mutually reinforcing expectations and behaviors. In the highest-performing school that was observed, there certainly was evidence of shared values and expectations that were based on clearly defined roles for teachers and students. Students received a consistent message from all of the teaching staff that they were in school to learn while teachers accepted the responsibility for ensuring that learning took place, even with difficult students. Such high expectations for performance must be backed up by a supportive environment where things such as school scheduling and other organizational necessities do not interfere with teachers' attempts to produce on-task, learning-focused classrooms. One

very detrimental practice that was frequently observed in various schools was a constant stream of students coming and going during reading and math classes. Scheduling should support and not defeat effective practices. To the extent that organizational slack exists, a careful pairing of appropriate teachers (i.e., those who are experienced and motivated to work with low-ability children) with Chapter I students would further result in a climate of mutual satisfaction. A positive social climate, although illusive to study and difficult to change, is a crucial antecedent to the theme of applying effective practices with consistency and intensity.

One other issue related to high expectations for teachers and students is worth mention. Realistically, high expectations must be accompanied by adequate incentives for teachers who must work longer and harder than their peers in successfully helping those low-ability students who require a great deal of effort in and out of the classroom. This is another important aspect of a supportive environment.

Conclusions Towards a Theory of Effective Schools

In general, these observations confirm much of what other research has found, but it is hoped that these results provide a richer description and understanding of effective practices with some important caveats. The results should be especially useful to Chapter I school principals and teachers interested in improving their programs. Beyond this, what theory-related

conclusions can be drawn? A theory of effective schools can emanate from at least three sources: theories of learning, theories of teaching, or organizational theories. Conclusions here are from the organizational perspective.

The early effective schools findings tended to portray the ideal elementary school as a rigid set of bureaucratic procedures. Bureaucracies promote efficiency but not necessarily effectiveness. Some organizational slack may be necessary to produce a truly effective school that addresses broad educational goals of cognitive learning and social development. Although a school fraught with discipline problems will require tight controls to turn things around, a more loosely-coupled system may be desirable once the discipline problems are solved. Schools, like other human service organizations, can function effectively as loosely-coupled systems <u>if</u> staff operate from mutually agreed-upon and beneficial expectations and goals. Of course this is easier said than accomplished.

Teachers need boundaries (i.e., District curriculum goals, reasonable behavioral standards) and should follow the common-sense advice of the effective schools research. But beyond this, they need some flexibility to adapt practices to their individual personalities, to prevailing school conditions, and to a variety of students. There also needs to be a greater awareness of how the student's home environment affects academic achievement and some means of addressing these factors when they hinder learning. (Some methods to bridge the gap between the school and home that

were observed included home visits by teachers, an emphasis on homework assignments which were monitored by parents, and parent volunteers in the school.) Teachers must also adapt to the organizational and political realities of their work sites and of the District. Realistically too, teachers operate with their own professional goals in mind. They may or may not be intrinsically motivated to work with low-ability students depending upon their professional goals. Teacher inducements are needed as well as methods to motivate students.

Loose coupling does not mean chaos. Classrooms viewed as completely isolated units may be detrimental to Chapter I and other low-ability students. Gross inconsistencies in instructional and behavior management practices from teacher to teacher may further confuse and alienate Chapter I students who, from the outset, are not experiencing success in school. In summary, schools and teachers require guidelines and coordination in the delivery of basic skills instruction, but some flexibility is necessary. They need to strike a balance between structure and spontaneity, between rules and innovation. A rigid set of practices applicable to all schools at all times is likely not the answer.

If this is the case, at what level should schools be changed? The other general conclusion of the observations is that motivation, attitudes, and expectations seem to take precedence over behavior in explaining effective schools. It may be that once these are in place, the appropriate practices will

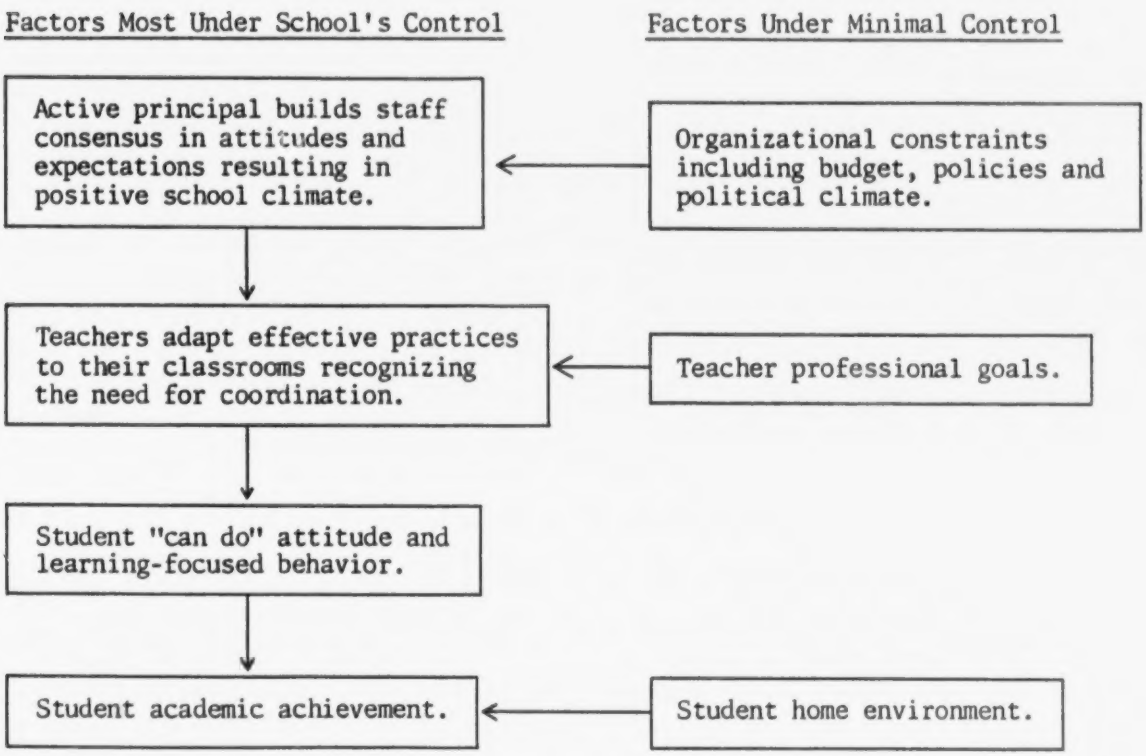
be obvious and will follow. Behavioral practices are important, but piecemeal or on their own, they may not transform an ineffective school into an effective one. This means an emphasis of people and how they interact over procedures. Unfortunately, changing these intangibles is a more arduous task than prescribing new bureaucratic procedures.

Change is difficult for any organization, especially public schools. Nevertheless, the most successful of the Chapter I schools that was observed got to where it was by a great deal of effort over a period of several years, turning behavioral problems around first and then addressing low academic achievement. This does not fit the unbounded optimism of the early effective schools movement. Perhaps more effort is needed to change schools than was thought early on. This should not be cause for disillusionment, however. It has and can be done with effort and without large increases in monetary resources.

In closing, a proposed model for creating effective schools is shown in Figure 4. Effectiveness here means the ability of a school to help its low-ability students achieve mastery in basic skills. This model identifies the key areas and the proper sequence of school-level interventions that are likely to succeed. It also recognizes that variables outside of the individual elementary school place constraints on successful change. Such a model can be the basis for further research on effective schools.

FIGURE 4

A MODEL FOR CREATING AN EFFECTIVE ELEMENTARY SCHOOL


Factors Most Under School's Control
Factors Under Minimal Control
Active principal builds staff consensus in attitudes and expectations resulting in positive school climate.
Organizational constraints including budget, policies and political climate.
Teachers adapt effective practices to their classrooms recognizing the need for coordination.
Teacher professional goals.
Student "can do" attitude and learning-focused behavior.
Student academic achievement.
Student home environment.

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